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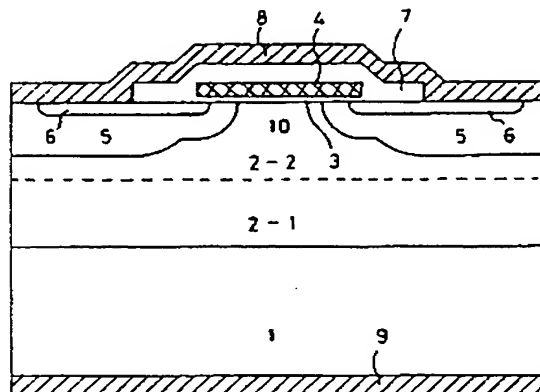
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TITLE : VERTICAL-TYPE DOUBLE DIFFUSED
MOSFET



ABSTRACT : PURPOSE: To enable reduction of an ON-resistance without impairing an element breakdown strength by a method wherein the thickness of a second semiconductor layer of low resistivity on the side of a channel forming region is made larger than the depth of diffusion of the channel forming region.

CONSTITUTION: An N-type epitaxial layer 2 in a conventional vertical-type double diffused MOSFET is constructed of two layers, a first epitaxial layer 2-1 and a second epitaxial layer 2-2. The first epitaxial layer 2-1 has the same impurity concentration as the epitaxial layer 2 in the conventional vertical-type double diffused MOSFET, while the second epitaxial layer 2-2 has a higher impurity concentration than the first epitaxial layer 2-1 and has a low resistivity. Even when the thickness of the second epitaxial layer 2-2 is made larger than the depth of diffusion of a P-type channel forming region 5, an element breakdown strength can be kept equivalent to the one of the conventional vertical-type double diffusion MOSFET.

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